

**15.** A semiconductor image sensing device comprising:  
a semiconductor image sensing element;

a mounting substrate having an opening wider than at least an image sensing area of the semiconductor image sensing element and having electrode terminals arranged around the opening to be connected to electrode portions of the semiconductor image sensing element by a face-down mounting method; and

a molding resin formed on a mounting region between the mounting substrate and the semiconductor image sensing element connected to the electrode terminals via bumps provided on respective surfaces of the electrode portions of the semiconductor image sensing element and on a portion of the mounting substrate which is adjacent to the mounting region, wherein

the semiconductor image sensing element is made of the semiconductor image sensing element of claim 6.

**16.** A semiconductor image sensing device comprising:

a semiconductor image sensing element;

a mounting substrate having an opening wider than at least an image sensing area of the semiconductor image sensing element and having electrode terminals arranged around the opening to be connected to electrode portions of the semiconductor image sensing element by a face-down mounting method; and

a molding resin formed on a mounting region between the mounting substrate and the semiconductor image sensing element connected to the electrode terminals via bumps provided on respective surfaces of the electrode portions of the semiconductor image sensing element and on a portion of the mounting substrate which is adjacent to the mounting region, wherein

the semiconductor image sensing element comprises a semiconductor element including the image sensing area, the electrode portions, and a plurality of micro-lenses provided on the image sensing area and an optical member having a configuration covering at least the image sensing area and bonded over the micro-lenses via a transparent bonding member and

the molding resin covers the electrode portions, the bumps, and the electrode terminals and is formed by using a material which cuts off at least a visible light beam and cures with an application of a UV light beam or heat.

**17.** A method for fabricating a semiconductor image sensing device, the method comprising the steps of:

fabricating a semiconductor image sensing element;

fastening the semiconductor image sensing element onto a mounting portion of a package to which the semiconductor image sensing element is fixed by using a fastening member;

providing connection between the electrode portions of the semiconductor image sensing element and metal thin wire connection portions provided on the package by using metal thin wires; and

forming a burying resin for burying the metal thin wires therein and protecting the metal thin wires, wherein

the step of fabricating the semiconductor image sensing element is made of the fabrication method of claim 10.

**18.** A method for fabricating a semiconductor image sensing device, the method comprising the steps of:

fabricating a semiconductor image sensing element;

providing connection between electrode portions of the semiconductor image sensing element and electrode terminals of a mounting substrate having an opening wider than at least an image sensing area of the semiconductor image sensing element and having the electrode terminals arranged around the opening to be connected to the electrode portions of the semiconductor image sensing element by a face-down mounting method by using bumps provided on respective surfaces of the electrode portions; and

forming a molding resin on a mounting region between the semiconductor image sensing element and the mounting substrate and on a portion of the mounting substrate which is adjacent to the mounting region, wherein

the step of fabricating the semiconductor image sensing element is made of the method of claim 12.

**19.** A method for fabricating a semiconductor image sensing device, the method comprising the steps of:

fabricating a semiconductor image sensing element;

providing connection between electrode portions of the semiconductor image sensing element and a mounting substrate having an opening wider than at least an image sensing area of the semiconductor image sensing element and having electrode terminals arranged around the opening to be connected to the electrode portions of the semiconductor image sensing element by a face-down mounting method by using bumps provided on respective surfaces of the electrode portions of the semiconductor image sensing element; and

forming a molding resin on a mounting region between the semiconductor image sensing element and the mounting substrate and on a portion of the mounting substrate which is adjacent to the mounting region, wherein

the semiconductor image sensing element comprises a semiconductor element including the image sensing area, the plurality of electrode portions, and a plurality of micro-lenses provided on the image sensing area and an optical member having a configuration covering at least the image sensing area and bonded over the micro-lenses via a transparent bonding member and

the molding resin covers the electrode portions, the bumps, and the electrode terminals and is made by using a material which cuts off at least a visible light beam and cures with an application of a UV light beam or heat.

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